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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,632	06/08/2001	Leopold B. Willner	K35A0744	9356

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WESTERN DIGITAL TECHNOLOGIES, INC.
ATTN: SANDRA GENUA
20511 LAKE FOREST DR.
E-118G
LAKE FOREST, CA 92630

EXAMINER
FLETCHER, JAMES A

ART UNIT	PAPER NUMBER
2621	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
	09/877,632	WILLNER ET AL.
Office Action Summary	Examiner	Art Unit	
	James A. Fletcher	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 February 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25,28 and 29* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-25, 28, and 29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16

January 2007 has been entered.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and·
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-14, 16-25, 28, and 29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Brown et al (6,868,225) in further view of Newman et al (6,154,600)

Regarding claim 1, Brown et al disclose an audiovisual system comprising:

- a system controller (Fig. 1, CPU 106);

- a storage device to store the portion of the audiovisual data and to play back

  the stored portion of the audiovisual data (Fig. 1, Hard Disk 105);

- a marking module to create metadata in response to a control input for

  marking the programs segments comprising information regarding the

program segments of the stored portion of the audiovisual data (Col 3, lines

58-59 "Bookmarks are stored [and] retrieved for the user");

- a display generator to generate a mosaic representation of the program

    segments of the stored portion of the audiovisual data (Col 15, lines 43-44

    "The invention places an indicator 1808 on the screen, indicating that a

    bookmark has been saved" and Col 20, lines 8-9 "index or bookmark

    indicators are displayed over the trick play bar");

- wherein the mosaic representation comprises a plurality of cells representing

    respective stored program segments of a program (Col 14, lines 44-47 "The

    Now Showing screen 1701 is shown which has a list of programs 1705 that

    are displayed to the user in descending order with the most recently obtained

    program at the top of the list"); and

- a program selector to select a program segment of the stored portion of the

    audiovisual data in response to a user input based on the information of the

    metadata, enabling the user to jump to and play back selected program

    segments of the plurality of programs (Col 15, lines 44-45 "The user can, at

    any time, access any of his bookmarks and continue viewing the program

    from the bookmark").

Brown discloses images providing the user with additional data regarding

the recorded program segments of a program (Col 16, lines 53-62), but does not

explicitly disclose those images as being extracted from the respective stored

program segments.

Newman teaches an audiovisual recording and reproducing system comprising a menu of program segments comprising images extracted from the respective stored program segments (Col 15, lines 4-8 "the storyboard GUI 440 includes a shot tab 404 displaying icons 406 representing previously captured clips. The storyboard GUI 440 likewise includes a display window 408 to display an image from a clip referenced by a selected icon 410").

As taught by Newman, a representation of a video program segment using a representative image extracted from the video program segment is well known, providing the user with a visual reference to the visual elements of the segment and simplifying the user's process of deciding which segment to view.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brown in order to include a representative image extracted from the video segment in an index of those video segments.

Regarding claim 2, Brown et al disclose an audiovisual system comprising a personal video recorder (TiVo, the assignee, is known as a manufacturer of PVRs).

Regarding claim 3, Brown et al disclose an audiovisual system wherein the storage device comprises a read/write, random-access, non-volatile storage media (Fig 1, Hard Disk 105).

Regarding claim 4, Brown et al disclose an audiovisual system wherein the metadata comprises user-generated modifications to pre-existing metadata (Col 5, lines 47-52 "when the parser 401 sees a private data event, it directs the byte stream to the private data DMA engine 404 and directs an event to the event buffer 413. The Media

Switch notifies the program logic via an interrupt mechanism when events are placed in

the event buffer" and Col 1, lines 53-55 "The system allows a user to save and retrieve

bookmarks for several audio and/or video programs on a single device").

Regarding claim 5, Brown et al disclose an audiovisual system wherein the pre-

existing metadata is received by the audiovisual system with the audiovisual data (Col

6, lines 65-67 "The demultiplexer multiplexes the extracted audio, video and private

data channel streams through the video input Media Switch port").

Regarding claim 6, Brown et al disclose an audiovisual system wherein the

metadata is stored subsequently to the storing of the stored portion of the audiovisual

data by the audiovisual system (Col 1, lines 58-60 "a bookmark function that allows the

user to bookmark a program where he left off").

Regarding claim 7, Brown et al disclose an audiovisual system comprising a

preference determination module, and wherein the control input comprises signals from

the preference determination module (Col 14, lines 50-52 "The system's list is based

upon the program preferences that the user has expressed to the system using the

thumbs up and thumbs down ratings").

Regarding claim 8, Brown et al disclose an audiovisual system wherein the

metadata comprises information indicating a level of interest by a user in the program

segment starting from the corresponding program location (Col 14, lines 50-52 "The

system's list is based upon the program preferences that the user has expressed to the

system using the thumbs up and thumbs down ratings").

Regarding claim 9, Brown et al disclose an audiovisual system wherein the metadata comprises information indicating a category of the program segment starting from the corresponding program location (Col 23, lines 20-22 "The program guide information is sorted in different ways, e.g., all movies 2901, favorite channels 3001, all channels 3101, all sports, etc.").

Regarding claim 10, Brown et al disclose an audiovisual system wherein the category comprises the genre of the program segment starting from the corresponding program location (Col 23, lines 20-22 "The program guide information is sorted in different ways, e.g., all movies 2901, favorite channels 3001, all channels 3101, all sports, etc.").

Regarding claim 11, Brown et al disclose an audiovisual system wherein the metadata comprises information indicating an identity of a user (Col 2, lines 1-2 "Bookmarks within a single program can be set for different users").

Regarding claim 12, Brown et al disclose an audiovisual system wherein at least one cell comprises a fixed image (Col 13, lines 65-67 "Any temporal elements [e.g., names, icons, location indicators] are drawn onto the screen over the video loops").

Regarding claim 13, Brown et al disclose an audiovisual system wherein at least one cell comprises a video image (Col 5, lines 39-40 "when the parser 401 finds a video event, it directs the stream to the video DMA engine 402").

Regarding claim 14, Brown et al disclose an audiovisual system which provides to a user information regarding the program segments of the stored portion of the

audiovisual data (Col 21, lines 23-27 "the invention displays a program guide area 2801

to the user which is a list of the programs that are currently airing, was aired, or is

scheduled on live TV") comprising:

- a storage device to store and play back a portion of the audiovisual data (Fig.

  1 Hard Disk 105);

- a grid generator to configure for the user display the information regarding the

  program segments of the stored portion of the audiovisual data, the

  information derived from metadata corresponding to the program segments of

  the stored portion of the audiovisual data, the information provided to the user

  via the user display in grid format with a plurality of grid elements (Col 21,

  lines 46-48 "The invention displays the program guide information in two

  different modes: two column or three column"), each grid element

  representing a program segment of the stored portion of the audiovisual data

  (Col 21, lines 27-29 "The CPU 713 parses the program guide information and

  creates program schedule information"), each grid element independently

  selectable in response to a user input (Col 15, lines 5-8 "When the user

  presses on the right side of the button 1403 on the remote control 1401, a

  more detailed program information screen is displayed to the user"); and

- a program selector to select a grid element that represents a selected

  program segment of the stored portion of the audiovisual data in response to

  user input, the selected program segment selected based on the information

  derived from the metadata, whereby the audiovisual system selectively plays

back selected programs of the stored portion of the audiovisual data starting

from selected program locations, thereby enabling a user to jump to and play

back selected program segments of the plurality of programs (Col 15, lines

44-45 "The user can, at any time, access any of his bookmarks and continue

viewing the program from the bookmark").

Brown et al show a grid of either rows or columns, but do not specifically

disclose a grid of both a plurality of rows and a plurality of columns.

Newman et al teach an audiovisual system with a grid of selectable

elements corresponding to the program segments of the stored portion of the

audiovisual data with a plurality of both rows and columns (Fig. 10, items 406).

As taught by Newman et al, a grid displaying a plurality of both rows and

columns of representative images from selectable video segments is well known,

providing the user with a wide choice of selections of elements, and simplifying

the user's decision making process regarding which element to select.

Therefore, it would have been obvious to one of ordinary skill in the art at

the time of the invention to modify Brown et al in order to include a grid of images

with a plurality of both rows and columns.

Regarding claim 16, Brown et al disclose an audiovisual system wherein at

least one grid element comprises an icon which is representative of the program

segment represented by the grid element (Fig. 24).

Regarding claim 17, Brown et al disclose an audiovisual system wherein at least one grid element comprises text which is representative of the program segment represented by the grid element (Fig. 24).

Regarding claim 18, Brown et al disclose an audiovisual system wherein the plurality of grid elements are chosen for display based on the metadata of the corresponding program segments of the stored portion of the audiovisual data (Col 23, lines 20-22 "The program guide information is sorted in different ways, e.g., all movies 2901, favorite channels 3001, all channels 3101, all sports, etc.").

Regarding claims 19 and 21, Brown et al disclose an audiovisual system wherein the plurality of grid elements comprises grid elements chosen for display based on a second and third user input (Col 16, lines 12-14 "Specific remote control[s] can be set up so that different levels of parental controls are engaged for each remote control").

Regarding claim 20, Brown et al disclose an audiovisual system wherein the plurality of grid elements are organized within the grid format in response to the metadata (Col 23, lines 20-22 "The program guide information is sorted in different ways, e.g., all movies 2901, favorite channels 3001, all channels 3101, all sports, etc.").

Regarding claim 22, Brown et al disclose an audiovisual system wherein the plurality of grid elements are organized within the grid format based on the program from which each program segment is derived (Col 23, lines 20-22 "The program guide information is sorted in different ways, e.g., all movies 2901, favorite channels 3001, all channels 3101, all sports, etc.").

Regarding claim 23, Brown et al disclose a method of playing back selected

portions of stored audiovisual data stored on a storage device comprising:

- providing stored audiovisual data corresponding to a plurality of programs,

  each program comprising a plurality of program locations, each program

  location representing a starting point of a program segment of one of the

  plurality of programs (Col 16, lines 51-60 "The user can rotate through three

  different levels of banners, each successively containing more information

  about the program. The lowest level banner 2001 contains minimal

  information such as channel 2002, station ID 2003, and time 2004. The

  second level banner 2005 displays, in addition to the information in the

  minimal banner 2001, information such as program title 2006, duration 2007,

  program MPAA or TV rating 2008, and thumbs rating. The final level banner

  2009 adds program text description 2010 to the second level banner 2005");

- creating metadata in response to a control input for marking the program

  segments comprising information regarding the program segments of the

  stored audiovisual data (Col 15, lines 35-38 "a user can watch the first half-

  hour of a two-hour program stored in the storage device 710 and then

  bookmark the program where he left off or he can place bookmarks within the

  program to mark points of interest" and lines 53-54 "A bookmark is placed in

  the same manner by pressing the select button 1406 to create a bookmark");

- displaying to a user the information regarding the program segments of the

    stored audiovisual data (Col 15, lines 42-44 "The invention places an indicator

    1808 on the screen, indicating that a bookmark has been saved");

- receiving a user input indicating a selected program segment of one of the

    plurality of programs based on the information of the metadata (Col 15, lines

    50-52 "the user can jump to a bookmark using the jump button 1414 on the

    remote control 1401" and Col 15, lines 44-45 "The user can, at any time,

    access any of his bookmarks and continue viewing the program from the

    bookmark"); and

- playing back the selected program segment starting from the corresponding

    program location of the stored audiovisual data, thereby jumping to and

    playing back selected program segments of the plurality of programs based

    on the metadata (Col 15, lines 44-45 "The user can, at any time, access any

    of his bookmarks and continue viewing the program from the bookmark").

Brown discloses images providing the user with additional data regarding

the recorded program segments of a program (Col 16, lines 53-62), but does not

explicitly disclose those images as being extracted from the respective stored

program segments.

Newman teaches an audiovisual recording and reproducing system

comprising a menu of program segments comprising images extracted from the

respective stored program segments (Col 15, lines 4-8 "the storyboard GUI 440

includes a shot tab 404 displaying icons 406 representing previously captured

clips. The storyboard GUI 440 likewise includes a display window 408 to display

an image from a clip referenced by a selected icon 410").

As taught by Newman, a representation of a video program segment using

a representative image extracted from the video program segment is well known,

providing the user with a visual reference to the visual elements of the segment

and simplifying the user's process of deciding which segment to view.

Therefore, it would have been obvious to one of ordinary skill in the art at

the time of the invention to modify Brown in order to include a representative

image extracted from the video segment in an index of those video segments.

Regarding claim 24, please refer to Examiner's comments regarding claim 4.

Regarding claim 25, please refer to Examiner's comments regarding claim 7.

Regarding claim 28, please refer to Examiner's comments regarding claim 12.

Regarding claim 27, please refer to Examiner's comments regarding claim 13.

4.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over the

combination as applied to claims above, and further in view of Yuen (6,240,241)

Regarding claim 15, Brown et al disclose an audiovisual system wherein at

least one grid element comprises an image (Figs 22 and 24), but do not specifically

disclose that the image is extracted from the program segment represented by the grid

element.

Yuen teaches using representative images selected from the program in an index

to help the user identify the program he is selecting (Col 1, lines 46-48 "A frame of the

video program that is recorded on tape is selected to be displayed with the directory in text form for one or more of the recorded programs").

. As suggested by Brown and taught by Yuen, using an image from a file in an index is well known and commercially available, providing the user with a more useful index entry.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Brown in order to provide a representative image icon in the index grid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (571) 272-7377. The examiner can normally be reached on 7:45-5:45 M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAF
2 March 2007

James J. Groody
Supervisory Patent Examiner
Art Unit 262 2621